<u>REMARKS</u>

The claims now pending in the application are Claims 1 to 12, the independent claims being Claims 1, 11 and 12. Claims 1 to 12 have been amended herein.

In the Official Action dated March 26, 2004, Claim 12 was objected to on formal grounds, Claims 1 to 3 and 10 to 12 were rejected under 35 U.S.C. § 102(b), as anticipated by U.S. Patent No. 5,719,951 (Shackleton), Claims 4 to 6 were rejected under 35 U.S.C. § 103(a), as unpatentable over the Shackleton '951 patent in view of the Drummond publication (Real-Time tracking of Complex Structures with On-Line Camera Calibration), Claims 7 and 8 were rejected under 35 U.S.C. §103(a), as unpatentable over the Shackleton '951 patent in view of U.S. Patent No. 6,188,776 (Covell), and Claim 9 was rejected under 35 U.S.C. § 103(a), as unpatentable over the Shackleton '951 patent in view of U.S. Patent No. 6,266,443 (Vetro). Reconsideration and withdrawal of the rejections respectfully are requested in view of the above amendments and the following remarks.

The formal rejection and the rejections of the claims over the cited art respectfully are traversed. Nevertheless, without conceding the propriety of the rejections, independent Claims 1, 11 and 12 have been amended herein more clearly to recite various novel features of the present invention, with particular attention to the Examiner's comments; Claims 1 to 12 further have been rewritten in non-means-plus-function format, to provide Applicants with an additional scope of protection commensurate with the disclosure. Support for the proposed amendments may be found in the original application. No new matter has been added.

The present invention relates to a novel image processing apparatus, method and storage medium which stores computer readable program codes for executing such an image processing method. In one aspect, as now recited in Claim 1, the present invention relates to an image processing apparatus comprising an input unit that inputs successive image data, a detection unit that detects a change between the successive image data, a

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generation unit that generates initial contour information for extracting an object existing in the image data, in accordance with an output of the detection unit and a color of the image data, and an extraction unit that extracts object image data corresponding to the object on the basis of the initial contour information generated by the generation unit.

Independent Claims 11 and 12 recite parallel features with respect to an image processing method and a storage medium storing computer readable program codes for executing an image processing method.

In each aspect, the present invention relates to the feature of generating initial contour information for extracting an object existing in image data, *in accordance with an output of a detection unit/step (detecting a change between successive image data) and a color of the image data* (see, e.g., Figure 1, elements 131 to 133).

Applicants submit that the prior art fails to anticipate the present invention. Moreover, Applicants submit that there are differences between the subject matter sought to be patented and the prior art, such that the subject matter taken as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made.

The Shackelton '951 patent relates to normalized image feature processing, and discloses a method of extracting an image. However, Applicants submit that the Shackelton '951 patent fails to disclose or suggest at least the above-disclosed features of the present invention. In the Official Action, the Examiner cites the Shackelton '951 patent for its teaching of generating initial contour information by detecting a change between successive image data. Without conceding the propriety of the Examiner's characterization, Applicants submit that the Shackelton '951 patent fails to disclose or suggest the feature of generating initial contour information for extracting an object existing in image data, in accordance with an output of a detection unit/step (detecting a change between successive image data) and a color of the image data, as disclosed and claimed in the present application.

Applicants submit that the other cited art fails to remedy the deficiencies of the Shackelton'951 patent. The Drummond publication is cited for its alleged disclosure of a three-dimensional model-based tracking system comprising input means that inputs parameter data concerning a camera parameter of the video camera, and detection means for detecting a change in image based on the parameter data; the Covell '776 patent is cited for its alleged disclosure of a video image analysis system comprising first area-division means for performing area division based on a color and texture, and second area-division means for performing area division based on motion of the image data; the Vetro '443 patent is cited for its alleged disclosure of object boundary detection utilizing video coding standard MPEG-4 (ISO/IEC 14496). Without conceding the propriety of the Examiner's characterization of these references, Applicants submit that none of these references discloses or suggest the feature of generating initial contour information for extracting an object existing in image data, in accordance with an output of a detection unit/step (detecting a change between successive image data) and a color of the image data, as disclosed and claimed in the present application. Nor are these references, whether taken individually or alone, believed to add anything to the Shackelton '951 patent that would make obvious the claimed invention.

For the above reasons, Applicants submit that independent Claims 1, 11 and 12 are allowable over the cited art.

Claims 2 to 9 depend from Claim 1 and are believed allowable for the same reasons. Moreover, each of these dependent claims recites additional features in combination with the features of independent Claim 1, and is believed allowable in its own right. Individual consideration of the dependent claims respectfully is requested.
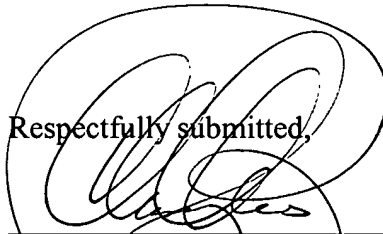
In formal matters, the specification and abstract have been amended as to matters of form, including English spelling, grammar, idiom, syntax and the like. No new matter has been added.

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Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Official Action, and submit that the application is in allowable form. Favorable consideration of the claims and passage to issue of the present application at the Examiner's earliest convenience earnestly are solicited.

Applicants request that the present Amendment be entered under 37 CFR § 1.116. Applicants submit that the present amendments merely are minor or formal in nature, and reduce the number of issues for consideration; the bulk of the amendments merely are provided to re-present the claims in non-means-plus-function format, and the independent claims are amended to emphasize the feature of generating the initial contour information in accordance with the detection result *and a color of the image data*. Applicants believe the present Amendment was necessitated by the outstanding Official Action, and submit that the present amendments were not previously made because Applicants believe the prior claims are allowable.

Applicants' attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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